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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,470	07/02/2003	Daniel Putterman	MACV P0009	4941

23349 7590 01/05/2009

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EXAMINER	
ZHAO, DAQUAN	
ART UNIT	PAPER NUMBER
2621	

MAIL DATE	DELIVERY MODE
01/05/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/613,470	PUTTERMAN ET AL.	
	Examiner	Art Unit	
	DAQUAN ZHAO	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/21/2008 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 2, 3, 4, 9, 10, 11, 12, 17, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US 6,089,321 B2), in view of Hooper et al (US 5,414,455), Kirkeby et al (US 7,130,623 B2) and further in view of Nelson et al (US 6,977,897 B1).

Regarding claim 1, Hayashi teach a method for networking a plurality of television devices, said method comprising the steps of:

- receiving a plurality of television signals (e.g. column 6, line 48+, numerous broadcast programs multiplexed in the digital satellite broadcast signal);
- selecting a set of tuners from a plurality of tuners available on a home-based network (e.g. column 6, lines 47-56, Hayashi teaches a home network system, which comprising a server 1, client devices 2 and 3 in figure 1, wherein the home server 1 has tuner unit 11A and 11B shown in figure 2 and column 8, lines 45-55. 11A and 11B corresponds to "a set of tuners from a plurality of tuners, and tuner unit 11A and 11B are assigned to client devices 2 and 3. The claim does not call for a plurality sets of tuner); the selected set of tuners residing within the home-based network (e.g. column 6, line 54).
- tuning each of said television signals in one of the tuners selected from the plurality of tuners (e.g. column 8, lines 36-56);
- buffering said television signals on a storage medium in at least one PVR media server (e.g. column 8, lines 4-14, hard disk drive 150, and figure 2, Memory 12A and 12B); the PVR media server residing within the home-based network (e.g. column 6, line 54).
- coupling a plurality of clients, over a network, to said PVR media server (e.g. figure 1, clients 2 and 3 are coupled to server 1);

- assigning at least two of said clients to one or more of said tuners(e.g. column 8, lines 36-55); and
- transferring, over said network, buffered television signals to said clients (e.g. column 7, lines 15-20).

Hayashi fails to specify the plurality of recording devices. It would have been obvious for one ordinary skill in the art at the time the invention was made to have used client device 2 and 3 as recording devices since Hayashi suggests video tape recorder in background of the invention (column 1, lines 37-45) in the home networking system to reduce the user's time of waiting for a broadcast program.

However, Hayashi fails to teach the PVR media server maintaining a write position for the buffering and a plurality of locations within the PVR system. Hooper et al teach the PVR media server maintaining a write position for the buffering (e.g. column 12, lines 20-54) and a plurality of locations within the PVR system (e.g. "locations" of the cache memory block 300 corresponds to the plurality of locations within the PVR system). It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the teaching of Hooper et al into the teaching of Hayashi to delivering videos without substantial incremental costs (Hooper et al, column 1, lines 60-67).

Hayashi and Hooper et al fail to teach the buffering comprising a configurable type buffer that has a configurable size for permitting storage of a selectable time duration of the television signals, the configurable type buffer for providing buffering of the television signals continuously by using the selectable time duration. Kirkeby et al

teach the buffering comprising a configurable type buffer that has a configurable size for permitting storage of a selectable time duration of the television signals, the configurable type buffer for providing buffering of the television signals continuously by using the selectable time duration (e.g. column 1, line56- column 2, line 18, column 7, lines 11-54 and column 9, lines 5-31). It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the teaching of Kirkeby et al into the teaching of Hayashi and Hooper et al to ensure the buffer has sufficient capacity to enhance the system reliability.

Hayashi, Hooper et al and Kirkeby et al fail to teach setting a set of boundary conditions for the read position and the write position; generating an event when the read position falls behind the write position an amount greater than the buffer size. Nelson et al teach setting a set of boundary conditions for the read position and the write position; generating an event when the read position falls behind the write position an amount greater than the buffer size (e.g. abstract, figure 4b and claim 9 of Nelson et al, "pointer spacing above maximum). It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the teaching of Kirkeby et al into the teaching of Hayashi, Hooper et al and Kirkeby et al to reduce the error of overflow for the buffer.

Claim 9, **17 and 20** are rejected for the same reasons as discussed in claim 1 above.

Regarding claims 2, 3, 10 and 11, Hayashi teaches a single PVR media server comprising a plurality of tuners (e.g. figure 2, tuner 11A and 11B).

Regarding claims 4 and 12, Hayashi teaches buffering said television signals on a storage medium comprises the step of storing at least one television signal on a storage medium in at least one PVR media server for a client so as to record at least one television program for said client (e.g. column 11, lines 17-30).

For claim 21, Hayashi teaches selecting a plurality of tuners located in a media server distributed over the network (e.g. figure 2). Hayashi fails to specify plurality of servers. Hooper et al teach plurality of servers (e.g. figure 8). It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the teaching of Hooper et al into the teaching of Hayashi to delivering videos without substantial incremental costs (Hooper et al, column 1, lines 60-67).

4. Claims 5, 6, 7, 13, 14, 15, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US 7,089,321), Hooper et al (US 5,414,455), Kirkeby et al (US 7,130,623 B2) and Nelson et al (US 6,977,897 B1), as applied to claims 1, 2, 3, 4, 9, 10, 11, 12, 17, 20 and 21 above, and further in view of Green et al (US 2004/ 0,218,905 A1).

See the teaching of Hayashi, Hooper, Nelson et al and Krkeby et al above.

Regarding to claim 6, Hayashi, Hooper, Nelson et al and Kirkeby et al fails to teach resolving any conflicts to assign an available tuner for television signal. Green et al teach resolving any conflicts to assign an available tuner for television signal (e.g. paragraph [0018]-[0019]). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Green et al into the

teaching of Hayashi, Hooper, Nelson et al and Kirkeby to quickly determine and resolve a program recording conflict (Green et al, paragraph [0004]).

Claim 14 is rejected for the same reasons as discussed in claim 6 above.

Regarding claims 7 and 19, Green et al teach resolving any conflicts to assign an available tuner for said television program comprises the steps of: determining whether one of said tuners is available to receive said television signal; if so, assigning said tuner to receive said television signal; if not, determining which tuners are potentially available; querying clients assigned to said tuners potentially available to determine whether said clients desire to cancel recordation of said television program; and assigning a tuner potentially available to receive said television signal if no clients cancel recordation of said television program (e.g. paragraph [0018]-[0019]).

Claim 15 is rejected for the same reasons as discussed in claim 7 above.

Regarding claim 5, 13 and 18, Green et al teach the step of storing at least one television signal comprises the steps of: assigning a tuner to said client (e.g. paragraph [0023]); allocating space on said storage medium to record said television program (e.g. paragraph [0018]; and storing said television signal on said storage medium during a time scheduled for said television program (e.g. paragraph [0031]).

5. Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US 7,089,321 B2), Hooper et al (US 5,414,455), Kirkeby et al (US 7,130,623 B2) and Nelson et al (US 6,977,897 B1), as applied to claims 1, 2, 3, 4, 9, 10, 11, 12, 17, 20 and 21 above, and further in view of Srikantan et al (US 6,857,130 B2).

See the teaching of Hayashi, Hooper, Nelson et al and Kirkeby et al above.

Regarding claims 8 and 16, Hayashi, Hooper and Kirkeby et al fails to teach generating a first position to identify a location within a selected one of said buffered television signals for a first client, and for generating a second position to identify a location within said selected buffered television signal for a second client, said second position being independent from said first position. Srikantan et al teach generating a first position to identify a location within a selected one of said buffered television signals for a first client, and for generating a second position to identify a location within said selected buffered television signal for a second client, said second position being independent from said first position (e.g. column 8, lines 10-19). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Srikantan et al into the teaching of Hayashi, Hooper and Kirkeby et al to fast reading from the storage medium.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daquan Zhao

/Thai Tran/
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